UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/629,033	07/28/2003	Robert N. Mayo	200208396	7375

22879 7590 04/29/2008

HEWLETT PACKARD COMPANY
P O BOX 272400, 3404 E. HARMONY ROAD
INTELLECTUAL PROPERTY ADMINISTRATION
FORT COLLINS, CO 80527-2400

EXAMINER	
WAI, ERIC CHARLES	

ART UNIT	PAPER NUMBER
2195	

NOTIFICATION DATE	DELIVERY MODE
04/29/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

JERRY.SHORMA@HP.COM
mkraft@hp.com
ipa.mail@hp.com

Office Action Summary	Application No.	Applicant(s)	
	10/629,033	MAYO ET AL.	
	Examiner	Art Unit	
	ERIC C. WAI	2195	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *01 February 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-18* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-18* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-18 are presented for examination.

2. In view of the Appeal Brief filed on 02/01/2008, PROSECUTION IS HEREBY REOPENED. A new ground of rejection is set forth below. To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid. A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below.

3. This Office Action is made Final on the basis of the Amendments to the claims filed 07/30/2007. Therefore, the finality of Final Rejection dated 10/18/2007 is withdrawn.

Double Patenting

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct

from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. Claims 1-2, 4-5, 10-11 and 13-14, are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-9, 15-24, and 30 of copending Application No. 10/629,040. Although the conflicting claims are not identical, they are not patentably distinct from each other. The examiner can ascertain no difference between the claims of the present application and copending Application No. 10/629,040. For example, claims 1-2, 4-5, 10-11 and 13-14 claim a transaction analyzer that uses frequency, cost and computational complexity to determine a priority metric. Copending Application No. 10/629,040 makes claim to a transaction director that utilized information associated with a frequency, cost, and computational intensity based on client side information associated with the request. It would be obvious to one of ordinary skill that the transaction analyzer of the present

application could determine the priority metric based on client-side information associated with the request.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 1, 4-7, 10, and 13-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chase et al. (US Pat No. 6,785,794).

8. Regarding claim 1, Chase teaches an information system, comprising:

a set of access subsystems each for use in accessing a persistent store in the information system (col 5 lines 56-59);

transaction analyzer that determines a priority metric for an incoming access transaction to the persistent store and that transfers the incoming access transaction to one of the access subsystem by matching the priority metric to the priority ranks (col 5 line 51 to col 6 line 2; wherein it is inherent that some component determines the priority

metric, i.e. service level attributes, and routes them to the physical resources with most capability).

9. Chase does not teach that each access subsystem has a corresponding priority rank. In Chase, the physical resources are continuously monitored and resources are then determined to be available as indicated by reported load (col 5 lines 53-59). The resources are then matched to the service level attributes (i.e. priority) of the incoming access requests.

10. It would have been obvious to one of ordinary skill in the art to modify Chase to teach ranking each resource in addition to determining availability. One of ordinary skill would realize that Chase already effectively teaches ranking whereby resources are ranked by their determined loading and availability.

11. Regarding claims 4-5, Chase does not teach that the transaction analyzer determines the priority metric by determining a dollar cost associated with the incoming access transaction (claim 4) or a computational complexity associated with performing the incoming access transaction (claim 5).

12. However, it would have been obvious to one of ordinary skill in the art at the time of the invention to determine the priority metric by determining a dollar cost or computational complexity. As is well known in the art, greater computational complexity equates with a higher dollar cost. One would be motivated by the desire to maximize greatest return on investment by giving priority to requests that return the most profit.

13. Regarding claims 6-7, Chase does not teach that the computational complexity is indicated by a number of database tables in the persistent store that are referenced by the incoming access transaction or that the computational complexity is indicated by a number of field matches specified in the incoming access transaction to database tables in the persistent store.

14. However, it is well known in the art that accessing a greater number of database tables of fields is a more computationally complex process.

15. Regarding claims 10, and 13-16, they are the method claims of claims 1, and 4-7 above. Therefore, they are rejected for the same reasons as claims 1, and 4-7 above.

16. Claims 2-3 and 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chase et al. (US Pat No. 6,785,794), further in view of Yu (US Pat No. 6,807,572).

17. Regarding claims 2-3, Chase does not teach that the transaction analyzer determines the priority metric by determining a frequency of occurrence for the incoming access transaction (claim 2) or a frequency of access of a database table referenced in the incoming access transaction (claim 3).

18. Yu teaches that depending on the frequencies of requests, and the load of other, more frequent queries, the application server will choose to give priority to other queries first (col 2 lines 50-54).

19. It would have been obvious to one of ordinary skill in the art at the time of the invention to include determining the priority metric based on a frequency. One would be motivated by the desire to increase flexibility and scalability to serve potentially a large number of clients during run time (col 2 lines 54-56).

20. Regarding claims 11-12, they are the method claims of claims 2-3 above. Therefore, they are rejected for the same reasons as claims 2-3 above.

21. Claims 8-9 and 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chase et al. (US Pat No. 6,785,794), further in view of Stefanescu et al. (US Pub No. US 2003/0013951 A1 hereinafter Stefanescu).

22. Regarding claims 8-9, Chase does not teach that the transaction analyzer determines the priority metric in response to a set of query constraints contained in the incoming access transaction (claim 8) or that the priority metric is based on a size of a database table in the persistent store to which the query constraints are to be applied (claim 9).

Stefanescu teaches prioritizing queues based on the supplied constraints to organize the data in a system with finite resources ([0107] lines 5-12). By interleaving the requests, processing can occur as soon as possible on systems where the amount of data to be transmitted is limited.

It would have been obvious to one of ordinary skill in the art at the time of the invention to include determining a priority metric in response to the size of the database table. One would be motivated by the desire to allow processing to being as soon as possible in order to meet SLA requirements ([0107] lines 10-16).

23. Regarding claims 17-18, they are the method claims of claims 8-9 above. Therefore, they are rejected for the same reasons as claims 8-9 above.

Response to Arguments

24. Applicant's arguments with respect to claims 1-18 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

25. Applicant's amendment dated 07/30/2007 necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

26. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric C. Wai whose telephone number is 571-270-1012. The examiner can normally be reached on Mon-Thurs, 8am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng - Ai An can be reached on 571-272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Meng-Ai An/
Supervisory Patent Examiner, Art Unit 2195